

REMARKS/ARGUMENTS

1. Request for Continued Examination:

5

The applicants respectfully request continued examination of the above-indicated application as per 37 CFR 1.114.

2. Amendments to the claims

10

Claims 33-36 are newly entered and amended based on claim 14, where the claimed apparatuses and methods are used to adjust the phase difference between an in-phase signal and a quadrature-phase signal or a positive differential signal and a negative differential signal. Referring to paragraph [0018], "It is to be noted that two or more of the above-mentioned circuits of the claimed invention can also be implemented at the same time. In the case of two, the two circuits can respectively adjust the phases of two input signals (one input signal per circuit) in order to adjust the phase difference between the input signals, wherein the two input signals may be a pair of differential signals, or I/Q signals of a receiver and/or a transmitter of communication systems," it is clear that these amendments are fully supported by the specification. No new matter is introduced. Consideration of these amendments is respectfully requested.

15

20

3. Claim rejections – 35 U.S.C. 103(a)

25

Although Claims 14 – 32 were rejected under 35 U.S.C. 112, the last argument presented by applicants overcame the rejection. Therefore, these claims will be argued with respect to a 35 U.S.C. 103(a) rejection as being unpatentable over Karneya. In addition, as to duplicate parts in independent claims, the examiner stated in the Advisory Action that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

30

Response:

Claim 14

The Examiner argues that the addition of a second line of elements produces no new or unexpected result. The applicants disagree. The prior art of Kameya

5 discloses utilizing a delay line to **delay** an input signal according to a control voltage. Even if two delay lines are adopted to delay input signals in Kameya, Kameya still fails to teach the limitation in claim 14 of the present invention

10 "...wherein by controlling at least one of the first and the second digital values, the phase difference between the first input signal and the second input signal is adjusted." The present invention is for adjusting a **phase difference** between two signals. Having two lines of elements enables the invention to flexibly adjust the phase of the first signal, the second signal, or both signals simultaneously in order to reduce the phase difference between the first and the second signal.

Furthermore, the inclusion of the second line of elements means that the phase of

15 the first signal can be adjusted firstly and the adjustment utilized to adjust the phase of the second signal. In other words, the first line of elements can operate **independently** of the second line of elements, **or in conjunction** to thereby adjust the phase difference between two different input signals. In short, if the input signal processed by the first line of elements is identical to the input signal

20 processed by the second line of elements and two non-related or duplicate signals are generated, then the second line of elements is sure to be deemed a duplicate of the first line of elements. However, regarding the claimed apparatus of this application, the signal processed by the first line of elements is different from the signal processed by the second line of elements, and the output signals are tuned

25 to have a pre-defined relationship under the control of the first line of elements and/or the second line of elements. Because the second line of elements is required to co-operate with the first line of elements for achieving the desired result, applicants believe that **the second line of elements is not a mere duplicate of the first line of elements and the claimed second line of elements**

30 **is sure to have patentable significance.**

Applicants therefore believe Claim 14 has overcome the rejections and is placed

in a position for allowance. Reconsideration of claim 14 is respectfully requested.

Claims 15-24

Claims 15-24 are dependent on Claim 14 and should be found allowable if Claim
5 14 is found allowable. Reconsideration of claims 15-24 is respectfully requested.

Claim 25

Claim 25 is a method claim describing the operation of the apparatus claimed in
Claim 14. According to the arguments under Claim 14, applicants therefore believe
10 Claim 25 has been placed in a position for patentability. Reconsideration of claim 25
is respectfully requested.

Claims 26-32

Claims 26-32 are dependent on Claim 25 and should be found allowable if Claim
15 25 is found allowable. Reconsideration of claims 26-32 is respectfully requested.

4. Patentability of new claims

Claim 33 is an apparatus claim describing elements similar to Claim 14, but
20 including the limitations 'a first adjusting circuit' and 'a second adjusting circuit' and
further including the limitation that the input signals are an in-phase signal and a
quadrature-phase signal.

Claim 34 is an apparatus claims describing elements similar to Claim 33, but
25 including the limitation that the input signals are a positive signal and a negative
signal of a differential signal respectively.

Claim 35 is a method claim describing an operation similar to Claim 25, but
including the limitation that the input signals are an in-phase signal and a
30 quadrature-phase signal.

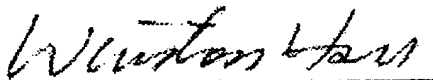
Claim 36 is a method claim describing an operation similar to Claim 25, but

including the limitation that the input signals are a positive signal and a negative signal of a differential signal respectively.

As newly entered claims 33, 34 and 35, 36 are based on previously presented
5 claims 14 and 25 respectively, and applicants believe claims 14 and 25 have been placed in a position for allowance, newly entered claims 33-36 should also be in a position for patentability. Consideration of newly entered claims 33-36 is respectfully requested.

10 Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Sincerely yours,

15 

Date: 03.15.2006

Winston Hsu, Patent Agent No. 41,526

P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

Facsimile: 806-498-6673

20 e-mail : winstonhsu@naipo.com

Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan.)

25